

IN THE CLAIMS

The following claim listing replaces all previous versions, and listings, of the claims in the present application:

1. (previously presented) An endoscope comprising:

a treatment instrument channel; and

an endoscopic spraying instrument comprising:

a liquid supplying tube configured to pass liquid therethrough and further configured
be removably inserted into the treatment instrument channel;

a rotatingly guiding groove disposed at a leading end side of the supplying tube is
and configured to rotate the liquid about a central axis:

a liquid rotating chamber disposed at a leading end side of the rotatingly guiding
groove, the liquid rotating chamber configured to rotate the liquid therein;

a spray nozzle formed in a leading end wall of the liquid rotating chamber and
configured to discharge the liquid from the liquid rotating chamber; and

an annular, protruded wall spaced outwardly from an outer periphery of the spray
nozzle, the wall protruded forwardly from and surrounding an exit of the spray nozzle.
2. (previously presented) The endoscope of claim 1, wherein a wall surface extending
between the outer periphery of the spray nozzle and the annular, protruded wall is defined by a
tapered surface or a curved, concave surface.
3. (previously presented) The endoscope of claim 1, wherein a wall surface extending
between the outer periphery of the spray nozzle and the annular, protruded wall is defined by a planar

P20361.A06

surface perpendicular to an axis of the spray nozzle.

4. (previously presented) The endoscope of claim 1, wherein a wall surface of the annular, protruded wall is parallel to an axis of the spray nozzle.

5. (previously presented) The endoscope of claim 1, wherein a wall surface of the annular, protruded wall is defined by a forwardly spread surface or a forwardly constricted surface.

6. (previously presented) An endoscope comprising:

a liquid supply tube;

a treatment instrument channel configured to insertably accept the liquid supply tube; and

a cap member to be provided in a leading end of an endoscopic spraying device, the leading end affixed to the liquid supply tube, the cap member comprising:

a cylindrical portion defining an interior of the cap member; and

a leading end wall at a leading end of the cylindrical portion, the leading end wall separating the interior of the cap member from an exterior thereof, the leading end wall comprising:

a spray nozzle communicating the interior with the exterior;

a first wall surface in the exterior of the cap member, the first wall surface extending radially outwardly from an outer periphery of the spray nozzle; and

a second wall surface in the exterior of the cap member, the second wall surface extending longitudinally outwardly from an outer periphery of the first wall surface.

7. (previously presented) The endoscope of claim 6, wherein the first wall surface is conical.

8. (previously presented) The endoscope of claim 7, wherein the first wall surface is curved in section.

P20361.A06

9. (previously presented) The endoscope of claim 7, wherein the first wall surface is planar in section.

10. (previously presented) The endoscope of claim 6, wherein the first wall surface is planar.

11. (previously presented) The endoscope of claim 6, wherein the second wall surface extends radially inwardly from the periphery of the first wall surface.

12. (previously presented) The endoscope of claim 6, wherein the second wall surface extends radially outwardly from the periphery of the first wall surface.

13. (canceled)

14. (canceled)

15. (canceled)

16. (canceled)

17-28. (not entered)

29. (previously presented) The endoscope of claim 1, wherein the liquid supply tube is substantially coaxial with the spray nozzle.

30. (previously presented) The endoscope of claim 6, wherein the liquid supply tube is substantially coaxial with the spray nozzle.

31. (new) The endoscope of claim 6, wherein said first wall surface is discontinuous with said second wall surface.

P20361.A06

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 4. This sheet, which includes Fig. 4, shows the annular protruded wall 22 constricted forwardly, as described, *inter alia*, on page 8, lines 19-21, and as shown Fig. 4 of Applicants' informal drawings filed concurrently with the present application, and as also shown in Fig. 4 of Applicants' priority document (Japanese Application No. 11-355305). No new matter has been entered.

Attachment: Replacement Sheet